





reddot design award winner 2013



2014 ■



Workplace systems

Electronics laboratories

Technical room equipment

Device systems

Didactic teaching aids

Test systems

Assembly tables and workbenches

Product Overview

Award-winning complete solutions for electronics laboratories, training centers, production and assembly plants, test systems for electrical safety and function.



This is our motto – because workplace systems, measuring and testing devices and test systems for electrical safety and function are our passion and our product world.

As the market founder of electronic laboratory equipment for industry and education and a manufacturer with unparalleled vertical integration, we stand for the highest standards and individual solutions.

Our new customer center

We have been successfully developing and producing our products in Freudenstadt for 70 years. Thanks to our high level of vertical integration in furniture construction and electronics, we have unique expertise in Industry 4.0 standards.

You can experience all of this directly on site in our new customer center.

We also offer interested parties the opportunity to visit the showroom virtually via a digital twin.



erfi-Song: Technical magic

We look forward to your visit!

Visit our customer center in Freudenstadt with 1.100 m² of exhibition space in conjunction with a production tour.

On site: Please make an appointment by calling +49 7441 9144-404 or by e-mail: kc@erfi.de

Or online: Click on our homepage: www.erfi.de or directly into the virtual customer center.



Virtual custom center



erfi technical room equipment erfi-Didactic training laboratories

Example of an elneos® connect training station with swivel structure and elneos® Orgatower

Highlights of the equipment

- 1. Electromotive swivel table
- 2. *elneos Orgatower* extendable with 2 compartments for holding of DIN A4 teaching aids and didactic panels
- 3. DIN A4 experiment frame, 2 rows, adjustable in depth
- 4. erfi-Didactic teaching aids (automation, control technology, building automation)

Further features

- 19-inch/3 U swivel structure with safety pressure switch strip
- Front table edge with Tech-edge alu-line
- elneos five device system for power supply unit, digital multimeter, function generator and basic device system
- Mobile pedestals with touch-to-open equipment



Room control software highlink® Power

The *highlink Power* software developed by erfi has been on the market since 1990 and is a market-leading product with over 3.000 installed licenses. The software is used to control and visualize devices, laboratory benches and laboratory rooms. With the *highlink Power* software package, you always have your technical room under control.



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Laboratory facilities for research and development



Electronics laboratory workstation elneos® connect

Highlights of the "next level" equipment

- Unique lighting system/invisibly integrated RGB LED light
- RGB indication light with live measured value display
- Connectors stand for stability, continuous media guidance and infinitely variable depth adjustment of the table legs, floating table top
- erfi-Bridge (*elneos-green) with device system acto
- Front table edge with new alu-line tech edge and comprehensive laser edge
- Electromotive height adjustment merges with the system
- Table frame made entirely of aluminum
- L-profile with the option of accommodating additional Expand 1 and Expand 2 profiles unique wiring compartments
- Integrated cable flap and cable tray
- 19-inch/3 U device cockpit made of aluminum

Cockpit equipment device system elneos® six

- 1. Plug-in unit for 1-phase AC source
- 2. Universal plug-in units for additional DC sources, digital multimeters, power meters, function and arbitrary generators
- 3. Control center to accommodate all devices with 8-inch multi-touch display,3D gesture control and voice control
- 4. Plug-in unit for 3-phase AC source with intelligent ring socket lighting incl. function labeling
- 5. Connect insert plate with all device interfaces such as USB A and USB B, LAN,10 digital outputs and 8 digital inputs

The benchmark for laboratory equipment!



Measuring & testing devices, Power supplies

elneos® six device system as 19-inch plug-in unit & standalone



8 device groups:

- Precision linear regulating power supplies up to 660 watts
- Linear power arbitrary generators up to 660 watts
- High-current power supply units up to 3.000 W and up to 125 A
- Digital multimeter up to 125 A
- 1- and 3-phase power meters
- Function generators up to 40 MHz
- Fast signal arbitrary genertors
- 1-phase and 3-phase AC sources

Innovations:

- 8-inch multi-touch display with fully tempered safety cover glass and ceramic print on the back
- 4 split screens for variable device displays
- Touchless operation through:
- 3D gestures via Airwheel and tactile feedback
- Independent voice control,
 intelligent and internet-independent,
 60 intuitive commands
- Graphical measured value display
- Live measured value display via connection panel
- Agile ring socket illumination for increased safety
- Multi-user mode simultaneous operation by several users

GERMAN DESIGN AWARD WINNER

The new device system elneos®six

elneos six with 8-inch display and Airwheel with tactile feedback



Optional: Second Airwheel and two encoders

Intelligent ring socket lighting













elneos six in the quattro-screen mode



elneos six socket lighting for AC sources

elneos® six compact

Gain workspace!

The compact control center with its 7-inch multi-touch display is the little brother of the large elneos six. It is installed in the Expand 2 aluminum extension profile of the elneos connect laboratory furniture program in a horizontal or vertical direction.

The extremely shallow installation depth creates free space at the workstation. It has an elegant rotary encoder and the same processor as the large elneos six. The device controls all 8 device groups.





8 | Product overview



Ergonomic Assembly Workstations

1. Software-controlled ESD assembly workstation elneos® connect

Equipment highlights

- elneos fix transfer system with ball roller conveyor
- Electromotive height adjustment
- Ergonomically curved worktop with laser edge
- Equipped with the *AWM¹* software

Further features

- Mounting bracket with rail and trolley
- Partially inclinable shelves
- Aluminum profile with screen holder and PC
- RGB LED light with BT and HCL function
- RGB indication light on the shelf
- Mobile pedestals with bow handles and Smart-Close

Mounting and testing from a single source

2. ESD test workstation elneos® connect with test system CAN class®

Equipment highlights

- Test cabin with CAN*class* Compact Tester for checking the electrical safety and function ² including *Candy* testing software
- RGB indication light on top of test cabin for good/bad indication
- QR code scanner included

3. ESD assembly workstation elneos® connect with elneos® Orgatower

Equipment highlights

- Perforated metal panel above and below the table top
- Pull-out material trays
- elneos Orgatower extendable with drawers and pull-out shelf

Further features

- Worktop ergo-line (laser edge)
- Storage shelf with lockable cable drawer
- Aluminum profile with screen-holder and All-in-One PC
- Integrated RGB LED light with BT and HCL function
- Equipped with the *AWM*¹ software
- RGB indication light on the bottom edge of the cable drawer

Workflow and image-based presentation





As a modern worker assistance solution, the AWM assembly software supports sequential work steps via image and video. Ideal for

complex and simple production steps in the learning phase as well as for permanent quality control in the value creation process.



erfi test systems



Illustration shows test system for commercial kitchen appliances with HV warm-, insulation-, PE-, leakage current- and power testing.

CANDY Power testing software

CANDY Power is a leading software in the field of test systems and offers comprehensive tools for dynamic test planning, test sequences and statistics. With the current version, it has been possible to realize the industrial needs with Industry 4.0 including automatic test plan generation.



Statistics

for electrical safety & function

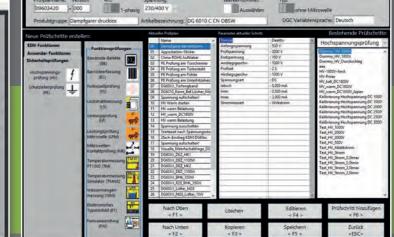
erfi develops and builds modular test systems according to customer-specific requirements. erfi's test systems can be divided into three main groups: Manual testers, CAN*class* compact testers and automatic test systems or big test facilities. The individual groups are used for the following tests: High-voltage tests, insulation tests, protective conductor tests, leakage current tests, power measurements and much more. Test specimen-specific adaptations are also professionally designed and implemented.

Compact Tester CAN class®



High voltage at its best: 500 VA output stages with 100 % duty cycle, alternatively current-limited high-voltage output stages for maximum touch safety, HV hot and cold testing. CAN*class* is a leading brand from erfifor the specialist area of electrical safety and function and stands for fully automatic testing in the areas of high-voltage-, insulation-, protective conductor-, leakage current and functional test.





High-voltage test plan with switching matrix

Automatic test plan generation



elneos® cubix – intelligent storage space

elneos® stay – functional seating furniture

erfi offers innovative, design award-winning cabinet systems and seating furniture with newly designed fronts and illuminated functional bases (open = green and red = closed) to complement laboratory and training facilities. All furniture edges are covered with a high-quality laser edge and guarantee high impact protection (permanent zero joint).

Special features (optional)

- 1. Aluminum impact protection on the outside of the cabinet
- 2. Interior LED lighting
- 3. Intelligent plinth lighting, open/closed cabinet display
- 4. Modern and flexible cubix elements
- 5. Functional fronts (magnetic/writable)
- 6. Electronic locking systems
- 7. Lockers
- 8. Tool trolley with garages
- 9. Elegant glass cut-outs
- 10. Functional handles/alternatively touch-to-open



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Cabinet systems



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